Forest Service **R3** Regional Office

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File Code: 3420 Date: October 21, 2002

**Route To:** 

Subject: Proposed Felipito II Dwarf Mistletoe Control Project, El Rito RD

To: Forest Supervisor, Carson National Forest

On August 28, David Conklin of our staff met with Len Scuffham and David Lawrence (Carson NF) to evaluate the proposed FY 2003 Felipito II dwarf mistletoe control/thinning project on the El Rito RD. The 148-acre project area is located within a mile of private land near the community of Canon Plaza. The project would involve non-commercial thinning to reduce dwarf mistletoe infection levels, improve stand growth and vigor, and reduce wildfire hazard in the wildland-community interface.

**Present stand conditions.** Most of the project area is almost pure ponderosa pine, although there are about 15 acres of mixed conifer forest in the northeast corner. The entire area is dense and multistoried, with a scattered mature overstory and moderate to severe overstocking in saplings and poles. No harvest or thinning activities have occurred for over 40 years. Stem densities easily exceed 600 trees/acre. Site quality is good, with an estimated site index of 80 to 90 (Minor).

Dwarf mistletoe infection is light to moderate overall in the pine, with between 20 and 30 percent of the stems infected. Some heavy infection occurs along the ridgetop on the north side of the stand. Severe western spruce budworm defoliation has occurred in the mixed conifer portion in recent years. At the time of our evaluation, a low level of western pine beetle activity was observed in the vicinity of the project area; significant outbreaks of this insect are now occurring in portions of northern New Mexico.

**Proposed treatment.** The proposed treatment is a low thinning, favoring the most vigorous dominant and codominant stems. Trees up to 9" will be thinned to an average 15-foot spacing; spacing will vary to favor the best available trees and provide a more irregular structure. Densities will be reduced from over 600 trees/acre to around 200 trees/acre. Some lightly infected trees will be retained where they are the best available leave trees. The prescription for retaining infected trees will be as follows: for trees 4" to 6" dbh, only DMR 1 trees should be retained; for trees 6" to 9" dbh, up to a DMR 2 can be retained. All visibly infected trees less than 4" dbh should be cut. Within the mixed conifer portion of the stand, all trees <9" dbh with severe budworm damage will be cut; and healthy pine will be favored.

**Benefits of treatment.** By reducing both stem densities and dwarf mistletoe infection, the proposed treatment should increase future productivity and reduce forest flammability. Fire hazard should be reduced on the nearby private land; some protection would also be provided to





an adjacent block of old-growth forest. The project would generate several dozen cords of accessible firewood for local (low income, minority) residents.

The low thinning will reduce the budworm "ladder effect." Density reduction should reduce bark beetle susceptibility throughout the treatment area. Without treatment, the stand will become increasingly stagnant and more susceptible to bark beetles.

The treatment represents a sound approach for managing dwarf mistletoe. The prescription will minimize growth loss and mortality from the parasite while maintaining accumulated growth. A year or two after mechanical treatment, the stand should be in a condition that will allow a prescribed burn to be implemented. Underburning has been demonstrated to have a controlling effect on dwarf mistletoe. The treatment will give us the tool of fire in future management of this disease. More aggressive control can be considered at the time of the next commercial entry in Felipito Canyon, which is anticipated in 15-20 years.

**Recommendations and Conclusions.** We recommend that the treatment be conducted between August and December to minimize the chance for a build-up of *Ips* bark beetles in the thinning slash. As much of the wood as possible should be removed as firewood. Piling and burning will be conducted where needed, especially along the ridgetop, to improve the fuelbreak. Any build-ups of *Ips* beetles in the slash could potentially be controlled by scorching the bark with a terra torch.

Implementation of the Felipito II and adjoining Felipito (see our 3420 letter of November 20, 2001) blocks will provide more heterogeneity in stand structure within the Felipito Canyon area. Directly south of this area is a 2000-acre block of designated old growth, while to the west the forest was cut fairly heavily in the Felipito timber sale of the early to mid 1990's. The proposed treatment will result in a relatively open forest featuring large trees and should be favorably received by the public. All NEPA work has been completed. Please contact us if you have any questions about this evaluation.

/s/ David A. Conklin DEBRA ALLEN-REID New Mexico Zone Leader, Forest Health

cc: Len Scuffham, Leonard Lucero, Douglas L Parker